

# SYNTHESO GLEP 1

Special lubricating grease with EP additives, compatible with EPDM



## Benefits for your application

- **Special lubricating grease for the assembly and lifetime lubrication of elastomers**
- **Almost neutral towards most sliding material pairings like EPDM/metal or plastic**
- **Reduces friction and wear**

## Description

SYNTHESO GLEP 1 is a special lubricant for a wide variety of applications with an almost neutral behaviour towards many elastomers (including EPDM) and plastics (except PC and ABS). SYNTHESO GLEP 1 can be used in a wide service temperature range and offers efficient protection against wear, good adhesion and resistance to water.

good resistance to EPDM elastomers, SYNTHESO GLEP 1 is mainly used in car brakes as it offers good advantages versus silicone greases, like better load-carrying capacity, good adhesion and compatibility with electric contacts.

## Application

SYNTHESO GLEP has been designed for the lubrication of metal – metal; elastomer – metal, plastic – metal, plastic – plastic sliding material combinations. The product is typically used in the automotive industry as assembly grease for plain bearings, e.g. in brake and clutch systems for linear motion in contact with brake fluids DOT 3, 4 and 5.1. Application examples: guide bushes and bolts, EPDM and SBR seals, clutch master and slave cylinders, corrosion protection of brake pad supports in disc brake calipers, brake boosters and noise reduction in elastic axle bearings, seals of steering columns. In such applications, SYNTHESO GLEP 1 facilitates assembly and provides reliable lubrication. Due to its

## Application notes

SYNTHESO GLEP 1 can be applied by brush, spatula, grease gun or the usual central lubrication systems. A wear test should be carried out prior to using SYNTHESO GLEP 1 in context with aluminum or aluminum alloys under dynamically high load conditions. Owing to the many different elastomer and plastic compositions we recommend checking their compatibility prior to series application.

## Material safety data sheets

Material safety data sheets can be downloaded or requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	SYNTHESO GLEP 1
Can 1 kg	+
Bucket 25 kg	+
Drum 180 kg	+



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Product data	SYNTHESO GLEP 1
Article number	012142
Lower service temperature	-50 °C / -58 °F
Upper service temperature	150 °C / 302 °F
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	280 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	310 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 360 mm <sup>2</sup> /s
Shear viscosity at 25°C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, upper limit value	5 500 mPas
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	4 000 mPas
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree
Copper corrosion, DIN 51811, (lubricating grease), 24h/100°C	1 - 100 corrosion degree
Drop point, DIN ISO 2176	>= 220 °C
Density at 20 °C	approx. 0.97 g/cm <sup>3</sup>
Flow pressure of lubricating greases, DIN 51805, test temperature: -45 °C	<= 1 400 mbar
Chemical composition, thickener	special lithium soap
Chemical composition, type of oil	PAG
Texture	homogeneous
Texture	fibrous
Colour space	beige
Water resistance, DIN 51807 pt. 01, 3 h/90 °C, rating	<= 1 - 90
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months

## Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 80 years.

**Klüber Lubrication München SE & Co. KG /  
Geisenhausenerstraße 7 / 81379 München / Germany /  
phone +49 89 7876-0 / fax +49 89 7876-333.**

The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

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